



2020 IMEKO TC-4 INTERNATIONAL CONFERENCE ON

METROLOGY FOR ARCHAEOLOGY AND CULTURAL HERITAGE

TRENTO, ITALY | OCTOBER 22-24, 2020

CALL FOR PAPERS *for the Special Session on* GEOMATICS AND CULTURAL HERITAGE: MODERN DIGITAL APPROACHES FOR SURVEYING AND DOCUMENTING THE PAST THROUGH GEOSPATIAL SOLUTIONS

ABSTRACT

Cultural Heritage is facing today an increasing application of geomatic solutions for surveying and mapping, with a very significant transformation in the methods of data acquisition and management. Digital data processing must be implemented in the most efficient and effective way for each specific context, and particularly in Archaeology.

The Geomatic approach currently supporting the integration of different range-based and image-based methods - in connection with different sensors - requires a careful implementation, founded on a scientific rigorous base, and the management of the most advanced technologies.

3D recording, monitoring, representation, information management must satisfy metric requirements and data quality assessment, at any scale to which they are applied from the single object to its geographical context

TOPICS

This special session aims to promote the interplay of the scientific community by presenting and discussing experiences and research contributions on the following topics:

- Integration of Geomatic techniques for Cultural Heritage 3D recording;
- Instrumental calibration for 3D data acquisition;
- Development of sensors and special devices for surveying and monitoring;
- Data fusion for advanced remote sensed techniques;
- Geomatic techniques for safety assessment and deterioration of structures;
- Long-term monitoring of structures;
- Quality evaluation and standards in recording and documentation;
- Multi-resolution geospatial data management in Archaeology;
- Historical BIM technology and point clouds based 3D modeling, GIS interface;
- Quality evaluation and standards in recording and documentation.

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SPECIAL SESSION #8

 <http://www.metroarcheo.com/special-session-8>



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